

Why to do this :

1. Determine visually if bacteria produce curli or not

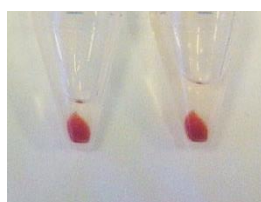
What you need :

1. Culture media : M63 Mannitol
 - Water
 - 13,6g/L of KH_2PO_4
 - 2g/L of $(\text{NH}_4)_2\text{SO}_4$
 - 0,5mg/L of FeSO_4
 - 11mL/L of a 6,8M KOH solution
 - 0,2g/L of MgSO_4
 - 0,5mg/L of Vitamine B1
 - 20mL/L of a 10% mannitol solution
2. Appropriate selective antibiotics :
 - Cm : 2mg/mL
 - Tet : 1mg/mL
 - Kan : 5mg/mL
 - Amp : 10mg/mL
3. Congo Red solution
 - M63 Mannitol
 - 1,2mL/L of a 0,8% Congo Red solution
4. Bacterial preculture

How to do :

1. Bacterial culture preparation
 - a) Add bacteria in 5mL of culture media
 - b) Add 50 μL of the appropriate selective antibiotic
 - c) Let bacteria grow at 30°C with a 180rpm agitation until $\text{OD}_{600} = 1$
2. Congo Red coloration of curli
 - a) Take 5mL of the bacterial culture in a 15mL tubes
 - b) Pellet down the cells at 15000G during 5min
 - c) Remove the supernatant
 - d) Add 3mL of the Congo Red solution
 - e) Let incubate for 10min
 - f) Pellet down the cells at 15000G during 5min
 - g) Remove the supernatant
3. Observation of results
 - a) Take a photo
 - b) Compare the color of the cell pellet with your positive and negative control

Bacteria with curli :



Bacteria without curli :

